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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,873	12/02/2003	Thomas Stanley Seay	177-2	2746

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EDWARD W CALLAN
NO. 705 PMB 452
3830 VALLEY CENTRE DRIVE
SAN DIEGO, CA 92130

EXAMINER	
HUYNH, NAM TRUNG	
ART UNIT	**PAPER NUMBER**
2617	

NOTIFICATION DATE	DELIVERY MODE
03/31/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ecallan1@san.rr.com

Office Action Summary	Application No.	Applicant(s)	
	10/725,873	SEAY, THOMAS STANLEY	
	Examiner	Art Unit	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27,34,36 and 48-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-27,34 and 48-51* is/are allowed.

6)☒ Claim(s) *36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 1/7/11. Claims 37-40 have been cancelled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bousquet (US 6,438,142) in view of Kosaka (US 2004/0048609).

Bousquet teaches a relay terminal (satellite) for relaying communications from originator user terminals to identified destination user terminals (mobile access network

allows communications between originator and destination terminals) (column 1, lines 9-13), comprising:

means for applying frequency-hopping patterns to said received communication signals for said relay of said communications signals (TDMA transmission method employing a plurality of carrier frequencies accessible selectively in receivers by frequency hopping);

wherein respectively different frequency-hopping patterns are applied to signaling data (first set of carrier frequencies/frequencies 21-1 and 21-2) and payload segments (second set of carrier frequencies/frequencies 21-3 to 21-N) of a given said relayed communication signal (the first set of carrier frequencies (21-1 and 21-2) and second set of carrier frequencies (21-3 to 21-N) are considered different frequency hopping patterns because they use different frequencies).

The invention of Bousquet teaches that the first set of carrier frequencies, or first frequency hopping pattern is applied to signaling data, however, Bousquet does not explicitly teach that the signaling data comprises acquisition and identification segments. Kosaka discloses a radio communication system (title). Kosaka teaches that the frame structure in the TDMA wireless communication system comprises a preamble and a data payload. The preamble identifies the signal (identification segment) and control information to achieve synchronization (acquisition segment) (paragraph 7). Thus the preamble of Kosaka falls in line with the signaling data of Bousquet. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the signaling data of Bousquet to include

identification and acquisition information, as taught by Kosaka, in order to synchronize and control the frame for proper reception.

Allowable Subject Matter

4. Claims 1-27, 34, 48-51 are allowed.

Response to Arguments

5. Applicant's arguments filed 1/7/11 have been fully considered but they are not persuasive.

Applicant submits that Bousquet does not disclose applying different frequency hopping patterns to a received signal. The Examiner respectfully disagrees. Bousquet teaches a TDMA transmission method employing a plurality of carrier frequencies accessible selectively in receivers by frequency hopping (column 1, lines 50-61). This teaching broadly suggests that frequency hopping is used to receive the transmitted signal. Bousquet further teaches that the plurality of carrier frequencies comprises a first set of at least one carrier frequency exclusively dedicated to transmitting signaling data and a second set of carrier frequencies that do not belong to the first set and dedicated exclusively to transmitting payload information (column 1, lines 50-61). Because the carrier frequencies are accessible selectively by frequency hopping and different carrier frequency sets are used for the signaling data and payload information, these two sets of carrier frequencies are two different frequency hopping patterns because in order for frequency hopping to be used successfully, the receiver must know

the frequency hopping pattern for which a signal is transmitted so that it can interpret the transmission. Accordingly for these reasons and the reasons set forth above the rejection(s) applied in the previous office action have been maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/
Examiner, Art Unit 2617